Amendments to the Claims

Please amend the claims to read as follows:

1   1.   (Currently Amended) A system for an integrated manufacturing execution

2   system, MES, that unifies the production data for a ~~manufactured~~ manufacturing

3   lot that moves from a current production line to different production lines,

4   comprising:

5   a database recording data pertaining to, a manufacturing lot ID identifying

6   the manufacturing lot, a current MES associated with the lot ID, MES rules and

7   transactions performed to manufacture the lot ID;

8   a memory storing data recorded in the database;

9   a computer of the current production line, the computer communicating

10   with the database and with production line MESs of each of the different

11   production lines to which the lot ID is moved to perform ~~one of~~ the transactions;

12   the database supplying ~~each of~~ the different production lines with ~~the~~ MES

13   rules of the current production line; and

14   the database recording transaction data, for each transaction performed

15   on the manufacturing lot, in the current MES, ~~and~~ whereby the current MES

16   unifies the production data for the manufacturing lot.

17   ~~a memory storing the data recorded by the database,~~

1   2.   (Original) The system as in claim 1 wherein, the database records

2   transaction data from each of the different production lines, the transaction data

3   corresponding to the MES rules of the current MES.

1   3.   (Original) The system as in claim 1 wherein, the database records
2   transaction data from each of the different production lines, the transaction data
3   including; track-in, track-out data, and processing data and measurement data,
4   which correspond to the MES rules of the current MES.

1   4.   (Original) The system as in claim 1, and further comprising:

2   a production computer of each of the different production lines supplying
3   the transaction data to the database.

1   5.   (Currently Amended) The system as in claim 1, and further comprising:

2   the database recording a tool reserve to move the lot ID to a reserved tool
3   of a different production line for ~~the~~ performing a next process step.

1   6.   (Currently Amended) A method for unifying manufacturing capacity
2   utilization with a unified MES, comprising the steps of:

3   checking capacity utilization status of multiple tools for performing the next
4   process step on a manufacturing lot;

5   reserving one of the tools to perform ~~the~~ a next process step;

6   transferring the manufacturing lot from a current production line to a
7   backup production line having the reserved one of the tools; and

8   performing the next process step in the backup production line, and
9   collecting process data and measurement data, which correspond to the MES
10   rules of the current production line.

7.   (Original) The method as in claim 6, further comprising the step of:

storing the process data and manufacturing data of the manufacturing lot in the current production line MES.

8.   (Currently Amended) The method as in claim 6, further comprising the ~~steps~~ step of:

defaulting the manufacturing lot to the next tool in the backup production line for the next process step.

9.   (Original) The method as in claim 6, further comprising the steps of:

defaulting the manufacturing lot to the next tool in the backup production line for the next process step;

checking the capacity utilization of all tools to perform the next process step; and

reserving a selected one of the tools in a different backup production line to perform the next process step.

10.   (Original) The method as in claim 6, further comprising the steps of:

defaulting the manufacturing lot to the next tool in the backup production line for the next process step;

checking the capacity utilization of all tools to perform the next process step; and

reserving the tool of the current production line to perform the next process step.